

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,622	03/09/2004	Taiichiro Aoki	KNI-185-A	2811
21828	7590 08/02/2006		EXAMINER	
CARRIER B	LACKMAN AND A	BALSIS, SHAY L		
24101 NOVI I	ROAD		ART UNIT	DADED MUMED
SUITE 100			AKTONII	PAPER NUMBER
NOVI, MI 4	8375		1744	
			DATE MAILED: 08/02/2000	5

Please find below and/or attached an Office communication concerning this application or proceeding.

_	
4	
0	

		Application No.	Applicant(s)					
Office Action Summary		10/796,622	AOKI ET AL.					
		Examiner	Art Unit					
		Shay L. Balsis	1744					
Period fo	The MAILING DATE of this communication Reply	on appears on the cover sheet	with the correspondence address					
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR I CHEVER IS LONGER, FROM THE MAILI Insions of time may be available under the provisions of 37 of SIX (6) MONTHS from the mailing date of this communicat in period for reply is specified above, the maximum statutory are to reply within the set or extended period for reply will, by the period by the Office later than three months after the and patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUN CFR 1.136(a). In no event, however, may ion. period will apply and will expire SIX (6) Mo y statute, cause the application to become	IICATION. a reply be timely filed  ONTHS from the mailing date of this communication ABANDONED (35 U.S.C. § 133).					
Status								
1)⊠	Responsive to communication(s) filed on	30 May 2006						
		This action is non-final.		•				
·	,	_	itters, prosecution as to the merits i	s				
ت (۵	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
	·	raci Expanto quayro, roco e	2 ,					
Dispositi	on of Claims							
4)🖂	☑ Claim(s) <u>1-12</u> is/are pending in the application.							
	4a) Of the above claim(s) 3,6,7,9 and 12 is/are withdrawn from consideration.							
5)□	5) Claim(s) is/are allowed.							
6)⊠	6) Claim(s) <u>1-2, 4-5, 8, 10-11</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)□	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)□ -	The specification is objected to by the Exa	aminer						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
	The oath or declaration is objected to by t	·		<b>u</b> j				
•		no Examinor. Noto the attach	54 CHICO / ICHOP OF TOTAL   10 TOZ.					
Priority u	nder 35 U.S.C. § 119							
a)[	12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the	e priority documents have bee	n received in this National Stage					
	application from the International E	Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment	(s)							
	e of References Cited (PTO-892)		Summary (PTO-413)	į				
3) 🛛 Inform	e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449 or PTO/5 · No(s)/Mail Date <u>3/9/04</u> .		o(s)/Mail Date Informal Patent Application (PTO-152) 					

#### **DETAILED ACTION**

### Election/Restrictions

Claims 3, 6-7, 9 and 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/30/06.

Applicant's election with traverse of Group I in the reply filed on 5/30/06 is acknowledged. The traversal is on the ground(s) that the claims are drawn to different aspects of a single inventive concept. Additionally, the applicant further traverses the restriction since the Examiner erred by not designating any claims generic. This is not found persuasive because, as noted in MPEP section 803, "For purposes of the initial requirement, a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02." The Examiner initially noted that the embodiment have a separate status in the art since the groups are directed to different species. Since applicant has not rebutted the prima facie shown by an appropriate showing or evidence as noted in MPEP 803, except for the argument noted above, applicant's argument is found unpersuasive.

The Examiner incorrectly stated that none of the claims were generic, and claims 1-2, 4-5, 8 and 10-11 should have been deemed generic in the restriction requirement. Since, the applicant elected the embodiment directed to group I (a single brush), claims 3, 6-7, 9 and 12 will not be examined and are withdrawn since none of them are generic or are directed toward the elected single brush.

Application/Control Number: 10/796,622 Page 3

Art Unit: 1744

The requirement is still deemed proper and is therefore made FINAL.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 4-5, 8 and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 includes certain limitations that render the claim indefinite. For example, the claim states "a longitudinal axis of the brush is parallel to said slit-like discharge opening" however, the nozzle and its slit-like discharge opening is not positively claimed. The applicant is not claiming the combination of a nozzle and an apparatus to clean a nozzle, but only the apparatus. Therefore, any limitations in the claim regarding the cleaning apparatus with respect to the nozzle are considered indefinite since the nozzle is positively recited. The claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/796,622

Art Unit: 1744

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zehner et al. (PGPub 2003/0127046) in view of Eriksson (USPN 6321688).

Zehner teaches a cleaning apparatus for a paint spray gun nozzle. The apparatus comprises a cleaning tank (12) containing a cleaning liquid (64). There is a cylindrical brush (52) which is disposed in the cleaning liquid (figure 4) for cleaning a nozzle (112). The brush is rotatable around a longitudinal axis (as shown by arcuate arrow in figure 4 and as described in paragraph 0016). Zehner teaches all the essential elements of the claimed invention however fails to teach that the brush can be reciprocated horizontally and vertically (claim 1) and that there are mechanisms that allow for the movement (claim 8). Erikkson teaches a cleaning apparatus comprising a longitudinal brush (29) that reciprocates vertically and horizontally (figure 3c and 3d). There is a swinging arm (59') for moving the brush horizontally and an extension arm (81) for moving the brush vertically. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zehner's brush so that it reciprocated vertically and horizontally as taught by Eriksson since the reciprocating brush will ensure that the entire portion (tip and sides) of the paint spray gun nozzle will get cleaned without spreading contamination (col. 2, lines 23-44).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zehner et al. ('046) as applied to claim 1 above and further in view of Tsutsumi et al. (USPN 6594457).

Zehner teaches all the essential elements of the claimed invention however fails to teach that the hair structure of the brush is arranged obliquely with respect to the longitudinal axis of the brush. Tsutsumi teaches a longitudinal brush with the bristles (211) that are arranged obliquely (figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zehner's bristles so that they are obliquely arranged as taught by Tsutsumi to increase the life expectancy of the brush. Bristles that are slanted rather than perpendicular to the longitudinal axis undergo stress when in use and therefore, will break more often than slanted bristles. Additionally, the slant of the bristles will create an induction force caused by the cleaning bias, and also a shearing force caused by the mechanical scrubbing of the brush. The induction force and the shearing force will act on the unwanted material on a nozzle and the material will be captured on the brush more effectively (col. 8, lines 33-39).

Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zehner et al. ('046) as applied to claim 1 above and further in view of Batchelder (USPN 2164443).

Zehner teaches all the essential elements of the claimed invention however fail to teach a brush cleaning means (claim 4) or a comb (claim 10) for scraping material off the long-length brush as it is rotated. Batchelder teaches a brush cleaning means (63) with teeth (66) adjacent a brush (22) with bristles. The cleaning means combs through the bristles as the brush rotates. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zehner's cleaning apparatus with a cleaning means such as a comb attached to the tank as taught by Batchelder so that the long-length brush will be kept clean since the comb-type

element will remove any accumulation of material that accrue on the bristles (page 3, col. 2, lines 20-34).

Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zehner et al. ('046) in view of Tsutsumi ('457) as applied to claim 2 above and further in view of Batchelder (USPN 2164443).

Zehner in view of Tsutsumi teaches all the essential elements of the claimed invention however fail to teach a brush cleaning means (claim 5) or a comb (claim 11) for scraping material off the long-length brush as it is rotated. Batchelder teaches a brush cleaning means (63) with teeth (66) adjacent a brush (22) with bristles. The cleaning means combs through the bristles as the brush rotates. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zehner in view of Tsutsumi's cleaning apparatus with a cleaning means such as a comb attached to the tank as taught by Batchelder so that the long-length brush will be kept clean since the comb-type element will remove any accumulation of material that accrue on the bristles (page 3, col. 2, lines 20-34).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/796,622 Page 7

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Slb

7/31/06